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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,162	02/12/2004	Leon R. Manole	2003-061	2161
32170	7590	02/16/2005	EXAMINER	
U.S. ARMY TACOM-ARDEC ATTN: AMSTRA-AR-GCL BLDG 3 PICATINNY ARSENAL, NJ 07806-5000			CHAMBERS, TROY	
		ART UNIT		PAPER NUMBER
		3641		

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	10/708,162	
Examiner	MANOLE ET AL.	
Troy Chambers	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
2a) This action is FINAL.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_ is/are allowed.  
6) Claim(s) 1-23 is/are rejected.  
7) Claim(s) \_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 4/5/04 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It was not executed in accordance with either 37 CFR 1.4(d)(2).

### ***Specification***

2. The disclosure is objected to because of the following informalities: In section [0001], "December 10, 203" should be "December 10, 2003"; in section [0010], "fgrantedon" appears to be "granted on". These are examples and may or may not be exhaustive. Applicant is to check the specification for similar spelling/scanning errors.  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 1 recites the limitation "the projectile" in line 5. There is insufficient antecedent basis for this limitation in the claim. Any subject following the term "for" is directed to intended use and, therefore, is not part of the claims. Hence, a reference back to subject matter included within such a phrase is improper. Additionally,

Art Unit: 3641

subsequent claims referring back to subject matter not part of the claims make said subsequent claims confusing. The claim(s) must be amended to positively recite subject matter before it can be subsequently referred to in the same/following claim.

6. Claim 6 recites the limitation "the first chemlucent chemical" in lines 1 and 2.

There is insufficient antecedent basis for this limitation in the claim.

7. Claim 6 recites the limitation "the ammunition" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 8 recites the limitation "the projectiles" in line 1. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 14 recites the limitation "the first chemlucent chemical" in lines 1 and 2.

There is insufficient antecedent basis for this limitation in the claim.

10. Claim 17 recites the limitation "the second chemlucent chemical" in lines 1 and 2.

There is insufficient antecedent basis for this limitation in the claim.

11. The above list of subject matter lacking antecedent basis may not be exhaustive. Applicant is to review the claims for similar deficiencies. A rejection applied to any non-compliant claims submitted subsequent to the instant action will not be deemed a "new" rejection since the applicant was notified of said non-compliance.

#### **Examiner's Claim Interpretation**

12. Claim 1 includes the phrase, "for an ammunition housing a multitude of projectiles utilizing chemlucent chemicals". Such a phrase is directed to intended use and, therefore, not part of the claims nor given patentable weight.

Art Unit: 3641

13. Claim 3, 8, 9, 11, 13, 20 and 21 recite subject matter relating to how the light-emitting chemical is created. The instant claims are apparatus claims and should be directed to such subject matter. Dependent claims directed to method of use/making are not given patentable weight.

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. As the claims can best be understood in view of the objections/rejections above, claims 1-14 and 22 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. 3774022 issued to Dubrow ("Dubrow"). Dubrow discloses a grenade including a plurality of flameless tracer projectiles. The flameless tracer projectiles includes an inner sphere 12 containing a first chemlucent chemical and an outer sphere 10 surrounding said inner sphere 12 and containing a second chemlucent chemical. The chemlucent agents can be in the form of a liquid or powder. The inner or outer spheres 12, 10, respectively, can be configured such that either one of the inner or outer spheres collapses first. The spheres can be made of plastic or glass. The relevant figures/disclosure is as follows: Figs. 1 and 5; col. 2, ll. 58-64; col. 6, ll. 20-65.

16. Claims 1-5, 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6497181 issued to Manole et al. ("Manole"). Manole discloses a projectile containing 2 chemicals 15 and 16 that form a light-emitting chemical.

***Allowable Subject Matter***

17. Claims 16-21 and 23 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claims 16-21 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited on form PTO-892 are cited as of interest to show similar projectiles.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (703) 308-5870. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (703) 306-4198.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4177. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

